

JPRS 81771

15 September 1982

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2316



FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

15 September 1982

EAST EUROPE REPORT
ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2316

CONTENTS

HUNGARY

- Havasi Draws Balance on Hungary's Foreign Trade
(Ferenc Havasi; PARTELET, No 8, 1982) 1

ROMANIA

- Petroleum Officials View Production Programs
(Various sources, various dates) 11
- Drilling Recovery Factor, by Gheorghe Vlad
Oil, Gas Increases, Victor Murea Interview

YUGOSLAVIA

- Croatian Farm Cooperative Official Scores Critics of 'Agrobusiness'
(EKONOMSKA POLITIKA, 26 Jul 82) 23
- Party Weekly Criticizes Private Takeover of Public Land
(KOMUNIST, 13 Aug 82) 25
- Regulation on Patent Application Procedure
(SLUZHBI LIST SFRJ, 25 Jun 82) 26
- Regulation on Recognizing Patent Rights
(SLUZHBI LIST SFRJ, 25 Jun 82) 37

HUNGARY

HAVASI DRAWS BALANCE ON HUNGARY'S FOREIGN TRADE

Budapest PARTELET in Hungarian No 8, 1982 pp 3-12

[Excerpts from a report by Ferenc Havasi, a member of the MSZMP Politburo and secretary of the MSZMP Central Committee, presented at the 23 June 1982 session of the Central Committee: "The Tasks in Developing our External Economic Relations"]

[Excerpts] In the five years since the adoption in October 1977 of the resolution concerning long-range external economic policy and development of the production structure, this is the second time that the Central Committee has placed on its agenda the questions of our external economic relations. Pressing reasons and significant changes have played a role in the repeated consideration of this topic.

The Central Committee's resolution of 20 October 1977 accurately reflected our knowledge at that time of the changes taking place in the world economy, their impact on our economic development, and our most important tasks in adjusting to them. However, the resolution had been based on certain assumptions that were not borne out by subsequent developments in the world economy. We slightly overestimated our possibilities regarding the feasibility of establishing external monetary equilibrium, the rate of economic growth, and an increase of our economy's ability to generate income. Furthermore, we overestimated also the favorable effect of the socialist countries' cooperation upon the development of equilibrium, and to some extent also the feasibility of obtaining modern technology from the developed capitalist countries, and of changing within a short time the structure of our export to this principal destination.

But even more important is the fact that the October 1977 resolution did not anticipate, and could not have anticipated, several very significant changes that affected the entire world economy and had an unfavorable effect on us as well.

One such change was the second so-called oil shock of 1979-1980 that resulted in a protraction of the capitalist world economy's recession, in an intensification of protectionism and discrimination, and in an increase of our competitive drawbacks.

Another such change was the sudden standstill of the process of detente, an intensification of tensions in international politics, with very tangible unfavorable effects on the development of international economic relations.

A further unfavorable and unforeseeable change occurred on international money markets, in a considerable constriction of the availability of credits and in a substantial rise of interest rates.

Other circumstances likewise necessitate that we consider the questions of the external economy. The rate of the expansion of the socialist countries' mutual economic relations has slowed down in recent years. The role of these relations in stabilizing our economy is very significant even today, but now unquestionably it is not what it was in years past.

The internal and external economic problems of some socialist countries have intensified, and this has had an unfavorable effect on economic cooperation as well. Development of economic cooperation with the socialist countries is in our primary interest; this is our basic effort at present and will remain so also in the future. By our actions and proposals we must jointly find a way to remove the obstacles to the expansion of our cooperation and to the intensification of economic integration.

Thus the changes in the international political and economic situation demand that we regularly evaluate and analyze our economic measures and trade policy. Over and above this, the special role of our external economic relations and their effect on our economic development also require that our political work be better attuned to the related tasks, and that economic behavior geared to the external economic conditions unambiguously receive the necessary political support.

In sum it can be said that the world economic background of our own economic development has changed significantly and become less favorable, raising stricter requirements than what we assumed in 1976-1977. Our ability to adjust to the external economy and market conditions determines our economic development far more than ever before. The point is not only that the share of export in final expenditure is nearly 30 percent, although such a high proportion of export is characteristic of few countries in the world. Rather the point is that there hardly is a Hungarian enterprise whose operations are not linked directly or indirectly to export or import, there is hardly a sector in our economy that does not affect in some way our external economic relations, and in the management of our economy there is hardly any measure that does not affect to a greater or lesser extent also the development of our external economic relations.

Participation in the international division of labor is a decisive factor and driving force of our economic development, rather than its complement. This is obvious especially in our present situation, partially because our growth rate depends primarily on our ability to earn foreign exchange, and thereby on the possible expansion of export.

Characteristics of Our Economic Development in 1974-1978

In the years preceding the 1973-1974 changes in the world economy, our economy developed dynamically, not faster than the average growth rate of the CEMA countries, and in a fairly balanced manner. The annual rate of economic growth approximated 6 percent in 1964-1973; on average for the 10-year period, real wages rose by 2.7 percent a year, real income by 5 percent, and the assortment of goods offered for consumption expanded.

Under the influence of state investments and central development programs, and also of the enterprises' development projects, there developed lively accumulation activity that formed the future structure of the economy. On this basis--and in the international political environment of detente that created favorable conditions--our foreign trade turnover increased even faster than production and was essentially in equilibrium. (In 1972, for example, we had a trade surplus with both principal destinations and provenances.)

The economic reform provided a perceptible impetus for all this. It was possible to achieve simultaneously rapid economic growth, a rise of the living standard, and external economic equilibrium. It can be said that all the permanent elements of our economic policy, which our party formulated after the counter-revolution and continuously renewed, asserted themselves successfully. The changeover to the intensive path of development was able to begin smoothly.

Then in 1973 came the world market's first oil shock, rather suddenly and actually unpredicted by anyone. Its economic effects soon unfolded and spread throughout the world. Today we already know that this was the start of a continuous change and rearrangement affecting the entire world, and this process is by no means over. But at that time we were not aware of this. It is important that we review the process of cognition and clarify whether we responded in time and properly, and especially that we draw the necessary lessons for the future.

The response of our economic policy to the changes in the situation of the world economy was essentially different in 1974-1978 than thereafter. In 1974-1975 we recognized only partially the altered world economic situation's important impact on our economy, and our tasks resulting from it. Although the party and government resolutions of that time reflect the realization that the changes taking place in the external economic conditions were unfavorable for us, we did not anticipate their further and practically continuous worsening. To the contrary we believed that the worsening of the external economic conditions would cease and a certain improvement would follow, even if the favorable price and market conditions of the previous period did not return. Only later did we begin to realize that 1973-1974 had been merely the start of a longer period of rearrangement in the world economy; that the world economic effects did not avoid even the socialist countries, that the socialist economies had at most greater opportunities to respond, and that it was their justifiably expected duty to resolve the conflicts more humanely, without greater shocks.

The drafting and adoption of the Fifth Five-Year Plan in 1975 was an important stage in the process of recognizing what had to be done. The plan determined essentially correctly the direction of the economic tasks: a significant improvement of economic effectiveness, improvement of the production structure, improvement of the quality of management, curtailment of the growth of domestic expenditure of national income, and gradual restoration of economic equilibrium.

But even this plan did not uncover completely and deeply enough the interrelations between growth and equilibrium as applicable to the Hungarian economy. This is evident from the report presenting the Fifth Five-Year Plan to the Council of Ministers, which states: "The requirements of social policy and economic development can be satisfied even to the necessary minimum extent only if

the growth rate of national income, despite the worsening conditions, approximates the growth rate attained in 1971-1975." Furthermore: "In comparison with the Fourth Five-Year Plan, the ratio of consumption to accumulation cannot be changed significantly, nor would it be warranted to do so."

Throughout the entire 1974-1978 period there was the assumption of economic policy that economic equilibrium could be restored parallel with maintaining the rate of economic growth and simultaneously raising the standard of living.

Analyses of the main economic processes and particularly our foreign debt led the Central Committee and the Council of Ministers to the conclusion--subsequently confirmed by the 12th party congress--that changes were necessary in our economic-policy practice: restoration of external economic equilibrium had to become the focus of action, and until we could support the developed level of allocations with the necessary performances, there could be no other course than a policy of maintaining the attained living standard, with a slight improvement in living conditions.

The question must be raised and answered as to whether we were not late in responding to the changes in the world economy. Were we not late in recognizing the direction in which we had to act? Perhaps because we overestimated our ability to adjust, we were late in many respects in our actual response, with our practical actions. And we must frankly admit this because it provides a lesson for our future conduct.

We did formulate the requirements for a general and significant improvement of economic effectiveness, but we implemented them with delay and not consistently enough in the productive sphere, at the enterprises and economic organs. We protected our enterprises from stiff market competition. We "helped" them not by creating the prerequisites for adjustment, but by guaranteeing them relatively stable conditions of economic activity, whereas foreign-market changes had required long ago their rapid adjustment.

We were late also in drawing practical conclusions regarding the conditions of allocation. Consumption and accumulation rose--as we have already pointed out--even when we incurred substantial price losses, when the world market significantly devalued our performances, and thus an increase of domestic expenditure of national income was no longer sound.

And finally we were late in recognizing that foreign borrowing could not serve the continuous functioning and development of the economy permanently and on the scale that it did, and as long as it did, in our country. Regrettably, too much emphasis on the favorable opportunities for borrowing, and on our credit-worthiness, diverted our attention from making in due time numerous changes that were necessary and unavoidable in production.

Economic-Policy Practice in Recent Years

So far as the results and problems of our economic-policy practice since 1979 are concerned, in sum it can be established that our two basic economic-policy

objectives--improvement of external economic equilibrium, and maintenance of the attained living standard--are proceeding on the path toward realization but are not yet past the critical stage.

To improve external economic equilibrium, economic growth has been kept more moderate than in the preceding years, we achieved that the rate of domestic expenditure of national income is lower than the rate of production, and we have begun to gradually end "overallocation." The volume of investment has declined by 6 percent a year in 1980 and 1981, and at present it is around the 1976 level. The growth of inventories also has slowed down significantly. The slower growth rate at the given effectiveness better served one of our main objectives, the restoration of economic equilibrium, than if we had attained a higher rate of economic growth. As a result, our national income's accumulation rate dropped to 20 percent in 1981.

On the whole we have been able to maintain the population's living standard and to slightly improve living conditions. Although in 1981 real wages per wage earner--as a result of the 1979-1980 decline and of the 1981 rise--was slightly lower (by 1.8 percent) than in 1978 (essentially it was at the 1977 level), real income per wage earner was 2.7 percent higher than in 1978.

Our economy's external equilibrium improved significantly between 1979 and 1981. The import surplus in 1981 was 10 billion forints, an improvement of more than 47 billion forints in comparison with the 1978 import surplus. All this indicates that finally favorable changes have begun in the management of inventories.

The nonruble-denominated trade turnover practically reached equilibrium in 1981. In dollar-denominated export we achieved a 20-percent expansion of volume in three years, and we were able to increase our prices by 16.6 percent.

In terms of the balance of trade, then, equilibrium or near-equilibrium was achieved in three years. All the enterprises, institutions and collectives that helped us to achieve this result deserve praise.

Is this external economic equilibrium stable enough, and can it be ensured also long term? Unfortunately, this cannot be said as yet.

First of all because the equilibrium situation did not develop primarily as a result of factors that maintain and strengthen equilibrium also long term --improvement of the production structure and of the quality and technical level of the products, a significant rise of economic effectiveness--but as a result of changes in the conditions of national income allocation, of a reduction of its domestic expenditure. The qualitative factors of development unquestionably improved, but not enough to produce such an improvement in external economic equilibrium. The stocks with which we were able to expand export at moderate economic growth stemmed from a minimal increase of consumption, and from a reduction of inventory buildup. But these possibilities are finite ones and are becoming increasingly exhausted.

Our external economic equilibrium will be stable when there is a significant increase in the quantity of economical and competitive export and in its share

of output, when the quality of economic activity considerably improves further, when not curtailment but sensible and economizing use results in that import grows more slowly than export; in other words, when our development--including both import and export--is fed by qualitative factors to a much greater extent than at present. We cannot say that we have reached this point as yet, but its attainment is our most important and most urgent task.

An unstable point of our dollar-denominated foreign trade is also its structure by provenances and destinations. The essentially zero-balance situation in 1981 developed in the following manner: two-thirds of the significant deficit in trade with developed capitalist countries was offset by the export surplus of our dollar-denominated trade with socialist countries, and one-third was offset by the surplus of our balance of trade with developing countries.

Regrettably, the unsteadiness of the external economic equilibrium is increased by worsening performance discipline and import security in trade with socialist countries. But a short shipment or failure to ship important products within socialist import immediately increases our dollar-denominated import.

The fact that our external economic equilibrium is not yet steady and depends to a large extent on domestic expenditure of national income makes for very tight regulation of the domestic economic processes. A difference of a few billion forints--an order of magnitude that normally would be negligible--in the domestic economic processes, in the planned incomes, is sufficient to make itself felt almost immediately in export and import. Therefore we must strive for optimum accuracy in regulation, and if immediate realization occasionally so requires--and, unfortunately, it does require--then we may be forced to use even instruments that are not entirely compatible with the nature of our system for managing the economy. But I wish to emphasize that we do this not in good cheer, but out of necessity. This happens only rarely, when we are compelled to use such instruments to avert even greater harm than what arises from a partial violation of our principles of economic management, when we have to react immediately to an unexpected worsening of external conditions and cannot wait until the effects of our measures that are compatible with the nature of the economic mechanism make themselves felt. But we remain convinced that an effective planned economy and continuous economic development in Hungary can be achieved only through the consistent practical application of the economic mechanism's basic principles, through the fullness of their effects.

The requirements of external economic equilibrium are only increased by the fact that--for reasons well known--a new source of danger has appeared in the international economy: a large-scale constriction of the opportunities for borrowing, the threat of a monetary crisis with unforeseeable consequences. It is still too early to tell whether or not such a crisis will arise, and whether we will be able to avoid its consequences that for us will mean a great political and economic loss. In any case, the course formulated at the leading capitalist countries' economic summit conference held recently in Versailles indicates that even if this threat can be averted, we can expect lenders to be much more cautious and stricter than previously, a policy that will restrict the expansion of trade and will frequently attempt to attach conditions to such an expansion, with all the consequences that will mean further hardships for us. In

the final outcome only one thing can create favorable prospects for us: if we achieve within the shortest possible time the largest possible surplus in our dollar-denominated foreign trade. For us it is of fundamental short-term and long-term importance to achieve this.

Our Principal Tasks

In 1981, our export and import jointly amounted to 10.2 billion rubles and 9.1 billion dollars, a substantial turnover for a country of our size. Our 1 percent share of world export merely reflects our average share. In certain commodity groups, however, our export--in accordance with our conditions and production structure--accounts for a significant share of world export. Thus Hungary's share of world export by commodities is as follows: meat, 2.4 percent; wine, 3 percent; live animals, 5 percent; sunflower seed, 5 percent; and apples, 6 percent. In many industrial items, including high-technology products, our share of world export is much higher than our average share: pharmaceuticals, , 3 percent; and buses, over 10 percent. Our share of world export is above the 1-percent average at present for farm machinery, telecommunications and vacuum-engineering products, aluminum products, plant protectants and shoes. In the course of our socialist development, then, the sectors and commodity groups essentially have already developed, or can be developed further, through which we are primarily linked into the international division of labor.

Metallurgy, the chemical industry, light industry and the food industry likewise export about one-fifth of their output. In these branches we find the products that are exportable, are keeping pace with world development, incorporate much specialized knowledge and represent high technology. Among such products belong some of our machine tools (for example, the metal machining centers), medical and other instruments, a good many products of the telecommunications industry, buses, some items of farm machinery, and many products of the pharmaceutical and plant protectants industries. Therefore it was warranted that in 1981 we sold on foreign markets 51 percent of the output of transportation equipment, 56 percent of the output of the telecommunications and vacuum-engineering industry, and 50 percent of the pharmaceutical industry's output.

According to a 1978 international study that compared 16 significant agricultural countries, Hungary ranked second in terms of the value of the per capita farm output. (Denmark was ahead of us, but we were ahead of such countries as the Netherlands, France, the German Democratic Republic, Bulgaria and Austria.) Our country ranked third in per capita bread grain and meat production, ranked sixth in the average yield of wheat and corn, and was in the middle range in comparisons of the annual milk yield per cow.

The sectoral structure of our production is best reflected in our rubel-denominated export. Engineering products, with a share around 60 percent, are outstanding in export to this principal destination, but the shares are substantial also of light-industry, farm and food-industry products. Unfortunately, the same cannot be said of our dollar-denominated export. In export to this principal destination the share of materials for further processing (for example, metallurgical products) and of semifinished products and parts is 30 to 40 percent, products of agricultural origin account for about one-third, but the share of machinery and capital goods barely reaches 15 percent.

The relatively low level of profitability can be attributed to the technical level and to the state of the standards of labor. In developed countries the productivity of labor in industry is two to three times higher than in Hungary. A comparative analysis of the industries of several countries indicates that the availability of machinery per worker is average, at about the same level as in Yugoslavia or Poland. It is estimated that the specific consumption of materials is 20 to 30 percent higher than in the industrially developed countries, and the difference in energy consumption is even greater. Because of transportation uncertainties, lax discipline in production cooperation and other factors, our enterprises often maintain (are forced to maintain) larger inventories than what capitalist companies are maintaining.

The situation is better in marketing products of agricultural origin, but here too there are problems. The production costs in agriculture are high, and the performances in comparison with the costs are not outstanding. Efforts to increase the volume often overshadow effectiveness, and as yet not enough attention is being devoted to the fact that--with more efficient organization and the better utilization of our own possibilities--these results can be achieved also with less import and at lower cost.

The quality of our products often does not meet the requirements that can be justifiably expected on the basis of the technical level of the machinery and equipment, and of the manpower's skills.

For example, we were unable to obtain technical acceptance of the N/C machine tools exported to Finland, the diesel train shipped to New Zealand could not be placed in operation for months, and extensive on-site repairs and replacements were necessary on the Hungarian buses in the United States and Turkey. There were serious complaints about the tires Hungary exported.

In the food industry--besides a few products of outstanding quality--we received significant quality complaints from our partners in developed capitalist countries regarding mostly wine, and also honey and ground paprika. When I was touring the Federal Republic of Germany, they showed me bottles of Tokaj wine that were closed with beer caps. Under such conditions we should not be surprised that our quality wines are priced the same as Spanish commercial wines, and that our prices are "depressed."

There is indeed protectionism, and even discrimination, but very often we ourselves cause the value of our products to drop on foreign markets. Even greater harm stems from the loss of goodwill: the reputation of our products declines, and even our good-quality products shipped to specifications are being accepted reluctantly, with demands for price reductions.

In production, to generate national income, we are using unnecessarily too much materials, equipment, labor and import (which also means that an acceleration of growth, under the present structure and level of economic activity, would only increase disequilibrium.) We do not have sufficient economical and competitive export capacity to offset the import necessary for the economy's dynamic growth.

The first essential conclusion is that in the coming decade our economic growth, our entire economic development and particularly its quality will depend on the extent to which we are able to improve our economy's adaptability to the international conditions and requirements, and the profitability of our export. Our economic policy and system of economic management must be made to serve these requirements more effectively than up to now.

From this it also follows that restoration and consolidation of external economic equilibrium will be an objective of outstanding importance in our economic policy for a long time and in the coming years in particular.

The volume and composition of production and their changes will be regulated unambiguously by the demand and by adjustment to foreign market requirements.

Already in the immediate future, in the interest of economic equilibrium's restoration and stability, we must shift our concentrated efforts from the sphere of national income's allocation to the sphere of production and economic activity.

The regrouping of developmental resources and of the existing productive factors must serve primarily the increased output of competitive products and the strengthening of their market shares. Resources must be used first of all for the development and technological modernization of the progressive sectors, and for investment necessary to conserve raw materials and energy. All this is a prerequisite not only for lasting external economic equilibrium, but—as we have repeatedly emphasized—also for maintaining the population's living standard.

Deliberate, decisive and earliest possible realization of the practical measures stemming from these conclusions is the more necessary because the indications are that we cannot expect a fortunate change and a softening of the requirements in the world economy, and instead must prepare ourselves for stricter requirements.

In accordance with our economic interests and political commitments, our economic cooperation with the socialist countries and our membership in CEMA will unalterably play a decisive role in our external economic strategy. The changes in the world economy have affected the socialist countries unfavorably, development of our economic cooperation has slowed down, the earlier problems have intensified, and also new ones have emerged. It is in our fundamental interest, both common and individual, to arrest this process by joint effort and to raise cooperation to a higher level.

Were we not a part of the socialist world economy, our losses as a result of the external economic changes would have been greater. At the same time it is our conviction that the possibilities inherent in cooperation are much greater than what are being utilized at present, and it is our basic objective and obligation to uncover these additional possibilities.

These joint efforts characterized the individual member nations' standpoints and proposals at the 26th session of CEMA, held in Budapest. They expressed

their interest and willingness to develop economic cooperation, deemed it necessary to accelerate the changeover to intensive development, and urged that the prerequisites for this be created as soon as possible.

The developing countries are our increasingly important trade partners. We are striving to expand our relations with them, on the basis of mutual advantages. Since the situation of the individual developing countries differs considerably, we deem it important that the development of our economic relations with them proceed on the basis of trade-policy guidelines differentiated according to the more important groups of developing countries, and that in sum these relations produce a substantial trade surplus.

We expect our already existing and expandable relations with developed capitalist countries to aid the development of our productive forces. We are striving to expand relations with them, on the principles of mutual advantages and economic sovereignty. All possibilities inherent in economic and intergovernmental relations must be utilized to reduce or end our competitive drawbacks stemming from protectionism and discrimination. We must develop our relations in such a way that there be constant near-equilibrium.

An important lesson of the conducted analyses was that our system of economic management must be improved and perfected considerably to increase our international competitiveness and to stimulate our adjustment. This work has already begun, in national economic and enterprise planning, within the price system and economic regulation, as well as in modernizing the system of organization and institutions.

However, the changes introduced so far are by no means adequate to stimulate (or compel) the enterprises to adjust to the international requirements. One of the principal tasks of the government organs in the coming years will be to prepare--on the basis of the proven principles and with the higher requirements in mind--the comprehensive development of our system of economic management and to make it operational in practice.

Development of our external economic relations is an involved task that sets high requirements also in the area of political work. There still are many who fail to understand that development of our international economic relations is an objective necessity, without which economic progress and the realization of the long-term economic-policy objectives set by our party are not possible. And they must also understand that this can be achieved only if our economy adjusts much better than up to now to the changing external economic conditions and the requirements of foreign markets, if it is able to increase significantly its competitive export. In this way the development of our external economic relations ties in with our economic objectives and becomes a decisive driving force of our economic development.

It is an important task of the party organs and organization to aid economic work that is oriented on the external economy and adjusts to the demand, to create the political prerequisites for this, a creative environment necessary for responsible entrepreneurship.

PETROLEUM OFFICIALS VIEW PRODUCTION PROGRAMS

Drilling Recovery Factor

Bucharest ERA SOCIALISTA in Romanian No 10 , 20 May 82 pp 20-23

[Article by Gheorghe Vlad, minister of petroleum]

[Text] One of the major economic problems continually and persistently in the center of the attention of our party and state leadership lies in providing the base of raw and energy materials, primarily through the best possible utilization of domestic resources. As emphasized in Comrade Nicolae Ceausescu's speech at the plenum of the National Workers' Council in November 1981, "The problem of energy and raw materials is the basic factor for fulfilling the plan and the decisions of the 12th party congress and for the country's general development and rise in the people's general well being."

As is natural, a completely special concern is being given crude oil and natural gases. The reduction in oil imports and continual rise in the degree to which needs are provided from domestic production are becoming a matter of primary interest, particularly under the current conditions of instability of resources and prices at the world level. Efforts being made in this regard are intended to serve a goal of special importance: that Romania by the end of this decade should become energy-independent. As we know, in most countries, the shocks of the oil crisis have brought assiduous efforts to provide energy resources and to manage them with maximum care , particularly hydrocarbons. In many industrialized states national programs have been worked out, ones which establish the immediate and long-range energy policy up to 1990 and 2000. Energy programs have been discussed and approved by government organs, giving great publicity to the measures taken and the directions in which action must be taken to fulfill the goals fixed. Prospecting and production activity have been stimulated by the unprecedented growth in prices, which has made oil extraction become profitable in areas in the past considered less attractive and inefficient, such as deep-water sea zones, those with permanent freezes, desert areas and so forth. Under the impetus of these states of affairs, geological research and exploitation methods and technologies are seeing a powerful evolution.

In 1980 Romania's crude oil extraction was 11.5 million tons and 11.6 million last year. The Directives of the 12th party congress and the five-year plan have forecast an extraction of 12.5 million tons annually for this year and continuing until 1985. The relative stability of production was dictated by

objective factors. Really, geological studies show that on one side the resources are limited but, on the other, they are getting accessible more and more with difficulty, situated at greater and greater depths and under more difficult geological conditions.

From the indication of the party leadership and of Comrade Nicolae Ceausescu, a new program for oil production in 1982-1985 was worked out. The program is the product of the participation of the best cadres of specialists in production, research, education and ministry. With this occasion each oil structure and each deposit were analyzed, the potential of all wells in production, measures to extend new procedures and increase the "recovery factor," that is, the degree of extracting the reserve it contains from the deposit. New measures to increase crude oil production in the next three years beyond the levels forecast in the five-year plan were established. A similar program was drawn up to increase the production of natural gases and for superior utilization of them.

The goals forecast in these programs come to complete the ones which served to substantiate and approve the 1981-1985 five-year plan. Fulfillment of them, as we shall see in this article, raises a number of complex problems which involve a large material and financial effort and perfect convergence of the forces in the oil trusts and enterprises, geological units as well as those supplying the materials, equipment. Technological research in the sectors which collaborate with the oil industry in turn has many aspects to resolve connected with promoting technical progress in the extraction of oil and natural gases with more courage.

Significant Reorientations in Geological Research

The programs we are concerned with present in a unified concept the major problems connected with increasing oil and gas production, these fuels and basic raw materials as well as the main objectives of the activity of geological and technological research intended to lead to increasing the stock of reserves. Kept in mind in the analysis of these problems was overcoming the difficulties created by the specific conditions which affect extraction activity and geological and technological research activity. In particular it is a question of the limited and nonregenerative nature of hydrocarbon reserves, a fact which requires firm measures for the most complete possible recovery of them, rational exploitation and utilization of all useful components--oil, gases, gasoline, ethane--as well as protection of the deposits.

Keeping in mind the more than one-century-long tradition of Romania's oil industry, an uninformed person could assert that we have reached the stage where there is complete knowledge of the country's oil and gas reserves. Such an assertion, however, would be wrong. Despite the particularly large investments and the immense volume of geological research done during the years of socialist construction in all the counties with an interest in hydrocarbons, all the opportunities for Romanian underground have not been brought out. An example is the start of a well in Draganu-Calina into production at the start of this year, in Vilcea County; it opened a new oil structure at nearly 5,200 meters depth and is the deepest well in production in Romania. To investigate this zone the move was to place new geological drilling as well as to carry out surface projects needed at an intense rate: stocks of separators, pipes, roads, social groups and so forth.

The geological projects finalized last year and this year have led to the discovery of new deposits in Stoenita (Gorj County), Ciumeghiu and West Mihai Bravu (Bihor County), Umbraresti and Independenta (Galati County), Bertesti (Braila County), Ileana and Artari (Calarasi County), Talpa (Teleorman County), Vilcele Est (Arges County). New accumulations of gas have been discovered in the zones of activity of the oil trusts in Arad, Bolintin, Moinesti, Tirgu Jiu as well as in Transylvania.

All this confirms the correctness of the orientation established by the party to continue developing geological research, to deepen the degree of knowledge of the country's underground through new research methods and techniques and investigation. Geological research for oil and gas in the current five-year plan has been given 32 percent more over the achievements of the last five-year plan and our task, included in the programs we are referring to, is to provide as high an efficiency as possible in spending this capital.

The potential of oil reserves able to be brought out and utilized in these years has two basic components. A portion is the reserves able to be discovered by programmed geological projects. A second component and the most important as far as size is concerned is represented by the reserves which are to be obtained by applying improved operating techniques which would lead to increasing the recovery factor for oil in the deposits from around the 32 percent reached until now to 37-40 percent.

There is special importance in the large increase in the potential of reserves which can be discovered through geological projects at depths of more than 3,500 meters. Here we have the need for a reorientation of geological project programs with regard to intensifying the testing of very deep formations as well as those located under geological conditions more complicated than those known in past years. In this regard we point out that deep drilling this year is 40 percent greater than last, while the volume of activity for this category of project for the entire current five-year plan will be double that of the last five-year plan.

Achieving the large volume of geological projects--seismic prospecting and test drilling--requires better organization of these activity, increase in labor productivity and application of modern techniques for recording and processing the data from seismic testing and for drilling wells and geophysical investigation. We dwell on this since there still are a number of deficiencies in these areas caused both by the lacks of the units as well as in collaboration, often inefficient, with the plants which supply equipment and materials.

We still have not succeeded in forming among all cadres in our units a long-range view of activity. Some units have neglected and are continuing to neglect geological drilling and efficiently making production tests on the test wells drilled. Last year, of the planned volume of geological drilling, around 13 percent was not carried out, that is, 120,000 meters; unfortunately other lags were recorded in the first four months of this year. This is the main reason for the failure to fulfill the plan for increasing oil reserves through new projects in 1981. Actually, deficiencies have persisted for several years, despite the fact that the party and state leadership and Comrade Nicolae Ceausescu personally have repeatedly drawn our attention to the responsibility we have and the need

which exists for increasing the country's base of raw and energy materials. Action has been taken slowly in digging and making production tests on the test wells, particularly in the zones of activity of the Tirgu Jiu Oil Trust and the Arad Drilling-Extraction Trust.

Learning the proper lessons from these shortcomings, the ministry's leadership council established special working programs for testing and opening zones of great interest for increasing crude oil production. In the Virtegu-Stoenita zone (Gorj County), for example, which currently is producing 1,200 tons of crude oil per day, recovery and test wells are being dug to set off the deposit and identify the possibilities for extending the structure discovered toward the west. A large volume of drilling was programmed in the zones of Milai Bravu, Nadlac and Seitin (Arad County), Contesti (Bacau County), Ghelinta (Covasna County). This last zone is producing more than 400 tons of crude oil per day and by the end of the year will reach more than 1,000 tons per day, with large human and material forces being concentrated here. The zones of Independenta and Umbraresti (Galati County), Mamu and Mitrofani (Vilcea County) also are the subject of serious programs of action. Geological testing through continuous drilling and on the Black Sea continental shelf for outlining and determining the production potential and moving to operate the deposit discovered here in past years. [As printed]

With regard to geological testing to discover new gas reserves, it will shift to a large extent to the zones outside the Carpathians as characterized in general by lower volumes of gases and higher degree of difficulty similar to the crude oil deposits in these zones.

As we were mentioning, the task to increase crude oil and gas reserves in the current five-year plan is based on doing a large volume of seismic prospecting and geological drilling jobs. In the case of seismic prospecting, it is necessary to recover the lags in testing of the zones and projects with complicated geological conditions and difficult access. A basic contribution here can be made by equipment with advanced design. An increase in the very deep drilling volume also requires appropriate supply with tubular material, drilling bits as well as improved equipment for complex geophysical testing of the wells and performance of the layers.

Technical and Technological Progress--The Basic "Link"

In recent years the techniques and technologies for drilling and extracting of oil and gas have evolved very much at the world level. Technical progress in this area has received great impetus together with the start of the energy crisis and unprecedented rise in oil prices. Technologies have been perfected for digging the very deep wells, for increasing the working speeds for drillings, for testing and utilizing crude oil reserves situated on the seas' continental plateaus, for drilling wells and installing pipes in Arctic zones with nearly permanent freeze or in densely populated urban centers, for the advanced recovery of crude oil from the deposits and for extracting crude oil from sand and resinoid shale and many others.

Undoubtedly, in courageously promoting technical progress one finds one of the basic conditions for the development of our oil industry. If we were to refer

only to increasing the reserves due to increasing the recovery factor, which we were mentioning earlier, it can be conceived of only in this way.

In past years, by promoting modern techniques and technologies, positive results were obtained in fulfilling the main indicators of the program to increase the recovery factor for crude oil from the deposits. Just last year the production obtained in this way was more than 3.5 million tons, considerably exceeding forecasts. As a result of job site experiments and testing projects, a volume of recoverable reserves was promoted into production and was nearly double that obtained through geological projects. Testing activity was firmly involved in working out new deposit studies, evaluating and substantiating investments and studies referring to application of new methods (injection of micelle solutions, polymers, procedures with bacteria and so forth) as well as operation of deposits of crude oil and bituminous sand by mining methods.

Despite the achievements obtained, shortcomings and deficiencies caused by the way in which our production and research-design units have taken action as well as delays in providing the necessary materials and equipment remain in the application of methods and measures to increase the recovery factor. In a number of deposits of the oil trusts in Bolintin, Ploiesti and Tirgu Jiu the volumes of water or gases forecast to be injected was not reached and the application of new procedures was delayed. Also delayed were projects to work out the investment documents for insuring the delivery of injection water to certain projects as well as to put the installations into operation to extend the procedure for injection of polymers, which gave good experimental results for one of the deposits in the Tirgoviste field.

Fulfillment of the forecasts for the program to increase crude oil recovery from the deposits was made much more difficult by failure to provide certain equipment, materials and chemicals by units in the machine, construction, metallurgical and chemical industries within the schedules and volumes contracted. In particular I mention the lack of injection pumps, extraction pipes, sets and valves, the substances and chemicals needed to treat the injection and reaction wells, a fact which to a great extent led to the delays mentioned.

The importance of precise application of the program to increase the degree of recovery of crude oil from the deposits is so clear that it does not need many demonstrations. We merely point out that just a 1-percent rise in the recovery factor through secondary and tertiary methods of operation means an addition of many million tons of oil. The delays mentioned, caused by their own deficiencies and those caused by the suppliers, have created a paradoxical situation: on one hand, the experiments made and the procedures applied semi-industrially have permitted the promoting of large volumes of reserves while, on the other hand, these reserves still are participating in production to a very small extent, since the projects to apply the particular procedures on the industrial scale have not been carried out in their entirety.

It is clear to us that this undesirable state of affairs must be eliminated. In order to achieve the levels for crude oil production forecast for 1985 and the increases in reserves, the ministry's leadership established measures to eliminate the deficiencies mentioned and to extend or generalize new extraction methods.

In coming years thermal methods will be tested and the move will be to the industrial phase for applying them through underground combustion or cyclical steam injection at around 25 deposits for which the studies made have proven that the application of these methods is indicated. The move will be to total achievement of the tests for injecting viscous water, and polymers on 10 projects as well as the injection of carbon dioxide--technologies which have proven to be efficient. Together with this, a chart has been worked out for digging a large number of recovery wells in the zones with known deposits, counting on the same effect-- maximum recovery of oil.

The development and modernization of our oil industry are a goal being sought assiduously through various other paths and methods. Our fields' production capacity currently is comprised of around 12,400 crude oil wells and a large number of gas wells. Improvement in utilization of the entire stock of wells-- by efficiently putting back into production the ones requiring intervention, reactivating all inactive wells and operating those with poor production to the optimum potential--will insure a large contribution to the daily extraction of crude oil. For this purpose measures have been taken with a view to providing access to the production wells by building and capital repairs on axial roads by a special unit which has been organized and supplied accordingly as well as with the forces of the trusts and fields. At the same time, we have in mind carrying out the centralized current and capital repairs for the mobile installations, for intervention and organization of mobile "service" teams and repair teams in the main working zones.

We are awaiting greater help from the machine construction industry in providing the quantity and quality of equipment as well as spare parts. We are referring to roller bits, borehole pumps, pumping bars, heat motors, gas and air compressors, equipment for new installations for topping and deethanizing forecast to be built. Respect for the program for assimilation of equipment is all the more necessary since the continued development and modernization of the Romanian oil industry depend on it to a great extent. It is hoped that the metallurgical industry will intensify its concerns with improving the performances of the drilling pipes and drive pipes as well as with having complete and steady delivery of them according to the contracts concluded. We also expect that the chemical plants will provide additives for treating drilling fluids, for assimilating and manufacturing inhibitors for combatting corrosion and the necessary substances for applying the new procedures for recovering the crude oil from the deposits.

Promoting what is new in production is made much easier by the design capacity which our oil and gas extraction industry has available. The Cimpina Research and Design Institute for Oil and Gases, with working groups in all the basins of the oil industry and a branch in the gas-bearing basin for Transylvania, in Medias, have available a large number of researchers and designers. Their activity, as well as that of the specialists in the production units, are directed toward solving the big technical problems on which the development of the oil sector depends. Collectives of research-design specialists are being assigned to each oil trust and are giving direct help in solving the technical problems of production for a long period. We need to follow more closely the activity of these specialized forces in order to obtain everything they can give.

All Activity Under the Banner of Economic Efficiency

This year and in each coming year of the five-year plan we must drill approximately 1,600 test wells and wells for exploitation and injection, with a view to increasing crude oil reserves and extraction, with a total of 2.3 million meters compared with the 1,200-1,300 wells per year up until 1981. The additional volume of projects equals the activity of two-three new drilling fields. Although certain organizational measures also are provided for, our attention turns on a priority basis toward the quality aspect of the work, toward increasing the working speeds on the wells due to extending new technologies and optimizing the drilling system. The metric length reached annually with a drilling installation still is below the achievements in the countries with a developed oil industry and differs a lot even from one trust to another. We have proposed to raise this basic indicator of the profitability of using installations supplied through the modernization, mechanization and automation of drilling processes, through reducing the time given to operations of disassembling-transport-assembly of the installations as well as nonproduction time caused by various reasons--damage, complication, organizational shortcomings and so forth.

A large investment effort is being made in this five-year plan to develop the extraction industry, with the volume of funds allocated for this purpose being 40 percent higher than the achievements of the last five-year plan. The greatest share is held by drilling and putting the new wells into production. At the same time, stocks of separators, pipes, compressor stations, topping and de-ethanization installations are being built. By 1985 the volume of fixed assets will rise at an average annual rate of 14.7 percent in the crude oil extraction sector, although production good will increase only at an average annual rate of 3.7 percent. This gap is specific to the extraction industry, since a large portion of the fixed assets placed into operation insures that the existing production capacities are maintained. In the natural gas sector, the ratio mentioned between the two indicators represents an even greater gap.

For this reason, the main indicators of economic efficiency are going through important influences: production-good per 1,000 lei fixed assets, labor productivity, production expenses. In order to diminish the effect of these objective factors, lively activity is taking place in all the oil trusts and enterprises with a view to better management of material and monetary resources and reducing specific consumption. On the initiative of the ministry's leadership council, for example, in recent months a broad action has taken place to inventory the materials and equipment existing in the units and those not being used in order to be distributed where there is a need. So a number of pumping units, drill pipes, extraction rods and pipes, various other materials could be introduced back into production circulation. Just in the first three months of this year the value of reused materials rose to more than 4.6 million lei. For the future we have proposed to introduce on the computer the records for material consumption and consumption of main equipment so that the stocks can be known efficiently and re-distributed as many times as necessary and utilized efficiently in production.

The extraction industry for oil and gas is not just a producer of fuels but also an important energy-consumer. For each 1,000 tons of crude oil, for example, an average of around 35 tons of conventional fuel is consumed, while 110-130 MWH of electric power are utilized for 1,000 meters drilled. In order to reduce these

consumptions, the collectives in the units are seeking modernization of technological installations, electrification of drilling installations, remote-controlled supervision of the operation of the fields and rationalization of lighting consumption. Special emphasis is being placed on recovery of secondary energy resources from technological processes, resources which currently are not being used in their entirety, such as the heat of burnt gases for turbocompressors and thermal motors, used steam and cooling agents for the topping installations, the heat of products, the energy of the gases' superpressure in the control and measurement stations.

There is special interest in the extraction and utilization of natural gases with high efficiency. Last year as well as this, a large volume of work was done to provide the resources of natural gases needed to fulfill the tasks established by the single national plan for Romania's social-economic development. New gas wells were drilled and put into operation, among which a large portion is situated on recently discovered structures, which were connected to the national system of transportation and distribution, and new compressor stations were built and put into operation.

In accordance with the program for developing gas production, by the end of this five-year plan several hundred wells will be dug and several new gas-bearing structures will be placed into operation, however, with small reserves, together with intensification of operation of existing deposits, installation of new capacities for compression and amplification of the system for gathering and transporting the gases. Projects currently are being carried out for superior utilization of gases to extend the topping installations in Calacea (Timis County), Abramut (Bihor County) and Dofteana (Bacau County). In coming years a new topping installations will be built in Ghelinta (Covasna County) as well as two new deethanization installations--one in Moldavia and another in Romania's western zone.

Taking into account the limited resources and capacities for extracting natural gases, a special task lies in fitting into the levels distributed to consumers. This winter's experience has shown that just by close collaboration we can obtain safety of operation both of the national system for transportation and distribution of gases as well as the beneficiaries' consumer installations. What is required is that all ministries, central organs as well as people's councils give all their attention to fitting into the gas distributions allocated. With regard to the Ministry of Petroleum and the national gas dispatcher, they will take firm action to have the units which exceed the distributions in certain periods fit into them.

The greater tasks belonging to the oil and gas extraction industry in the current five-year plan bring important changes in the area of the labor force, its structure, particularly from the viewpoint of quality. The human potential currently working in the ministry's units is more than 109,000 persons, of which 96,000 are workers, 31,000 are foremen and 3,000 are engineers. This potential is to increase considerably by 1985. But this is not the most important thing; what is most important is providing the growth in number of personnel for the basic trades and specialties, particularly drillers, head drillers and foremen for drilling, for production testing and for capital repairs and interventions on the wells.

The utilization of drilling installations and equipment and interventions with a high degree of technicalness, initiating new processes of the advanced recovery of crude oil as well as improvement of existing ones and the extending of automation of the operation of the crude oil and gas wells have profound implications for forming and for the advanced professional training of the labor force. We have proposed to provide for the substantial increase in number of qualified workers through schools, for which purpose the current school network of the ministry will be developed by establishing new units in the zones with production prospects for crude oil and gas in the counties of Arad, Bihor, Covasna, Dolj and so forth. A broad program has been compiled for the advanced training of the labor force on the drilling and extraction fields. Taking into account the still great fluctuation of the personnel, particularly for the driller trades, the ministry has proposed to take firmer measures for improving the working and living conditions of the people in all units, including up to all working points, where actually the fate of oil and gas production is decided.

A powerful detachment of workers, profoundly attached to our party and state policy, is working in the oil and gas extraction industry. They are putting forth all efforts with a view to increasing production and fulfilling this year's plan and for preparing all conditions for fulfilling the programs and measures worked out for the purpose of providing the needs of the national economy for these basic raw materials and fuels to the greatest extent from domestic resources.

Oil, Gas Increases

Bucharest SCINTEIA in Romanian 9 Jul 82 pp 1, 2

[Interview with Deputy Oil Minister Victor Murea by Dan Constantin]

[Text] [Question] As was announced, at its 3 July meeting the RCP CC Political Executive Committee analyzed and approved the program on increasing crude oil production and the program on increasing gas production for the 1982-1985 period beyond the forecasts for the current five-year plan. In connection with these programs, which basically seek to increase the degree to which domestic resources provide for the national economy's needs for hydrocarbons and substantially reduce imports, I had a conversation with Comrade Victor Murea, deputy minister of petroleum.

[Answer] In recent years the party leadership has continually and persistently stressed the need for more powerful development of our own base of raw materials and energy resources as a priority problem of development of the national economy in the current five-year plan and continuing up to the end of this decade. The two programs on the supplementary increase in crude oil and gas production, over the forecasts for the five-year plan, worked out on the initiative and under the direct guidance of the party's secretary general Comrade Nicolae Ceausescu, were adopted at a time when the current international economic circumstances continue to be marked by a serious oil and energy crisis. Implementation of these programs can mobilize the workers' efforts in the oil industry and other branches which contribute to increasing crude oil and gas production to a greater extent, efforts to fulfill the strategic goal established by the 12th party

and that is to insure Romania's energy and fuel independence by the end of this decade.

[Question] The program adopted provides for a constant growth in crude oil production which is to reach 15 million tons by 1985. What measures are to be taken to reach this level of production?

[Answer] Romania's crude oil extraction in 1980 was 11.5 million tons, while last year it was 11.6 million. For this year and continuing up to 1985, the five-year plan has forecast an annual extraction of 12.5 million tons. The relative stability of production has been dictated by a number of objective factors, with geological studies showing that, on one hand, resources are limited but, on the other, accessible with greater and greater difficulty, being located at great depths and under difficult geological conditions. During the last part of 1981, the party leadership and Comrade Nicolae Ceausescu personally requested that workers in the oil industry analyze with maximum responsibility the existing opportunities for increasing crude oil production. We can say that the best specialists from production, research, education and the ministry participated in fulfilling this task and in substantiating the program to increase crude oil production. A thorough analysis of all the oil-bearing structures and deposits and the wells' potential as well as technologies and solutions intended to lead to increasing the degree of recovery of crude oil from the deposits have brought out the certain possibilities for a constant increase in crude oil production in the 1982-1985 period.

The production of 15 million tons of crude oil established for 1985 is 20 percent greater than the forecasts of the five-year plan, which illustrates the dimension of the program for supplementary increase in crude oil production. It is proper to state that workers in the oil industry are powerfully mobilized for exemplary fulfillment of the forecasts for this program, being aware of their responsibility to fully make their contribution to the steadfast progress of the national economy and to strengthening Romania's independence and sovereignty. The actions being taken to increase crude oil extraction in this five-year plan generally refer to improvement of activity in the area of geological research, drilling, operation of the wells and training of cadres. Specifically, the program provides for concentration of drilling in the zones of primary interest and at great depth, where 500 wells with an average total production of around 10,000 tons per day will be dug in the 1982-1984 period. A large volume of projects is to be done in the zone of the deposits in Virteju-Stoenita, Bibesti-Bulbuceni, Calina-Draganu-Palei, Piscuri-Moreni, Ghelinta-Comandau, Contesti, Mihai Bravu, Seitin-Nadlac, Turnu East. It should be noted that the majority of these projects finalize the geological research done in past years, which have led to identification of new oil reserves both at ordinary depths as well as great depths.

A main provision of the program for supplementary growth of crude oil extraction in this five-year plan refers to continuing the testing and drilling projects on the Romanian continental shelf of the Black Sea and beginning crude oil exploitation in the Black Sea. Units of the machine construction industry will provide for the progressive scheduling of delivery of the drilling and operating platforms, which will create conditions for drawing into economic circulation the hydrocarbon reserves discovered in the Black Sea.

Of course, greater attention is to be given to intensive utilization of the existing stock of wells and improvement in their operating system. For example, just a 3-percent increase in the coefficient of utilization of the wells this year will bring an increase in production of 70,000 tons of crude oil. At the same time, by the end of this year 242 nonproductive wells which require complex work of capital repairs will be brought back into operation.

A separate chapter of the program refers to the measures for intensification of methods for increasing the degree of recovery of crude oil from the deposits. Methods to increase the final recovery factor will be applied to 150 deposits, which will bring a 32-percent increase in it from the current 32 percent to around 40 percent by the end of the five-year plan. Big jobs to extend underground combustion will be carried out in the zones of Videle-Balaria and Suplacul de Barcau, while the experimentation and extending of cyclical injection and continuous injection with steam will be carried out at four new deposits. At the same time, in the coming period the move will be to experimentation and application of methods for extracting crude oil through mining methods in Sarata Monteoru, Runcu-Bustenari and Solont.

[Question] Please give us several of the provisions and measures included in the program for increasing gas production in the 1982-1985 period, beyond the forecasts of the five-year plan.

[Answer] As we know, a main source of hydrocarbon is natural gas, a resource which also is limited. The program adopted provides for a supplementary increase in gas production of around 10 billion cubic meters in the current five-year plan. For the most part the increase will be achieved on the basis of increasing the production of associated gases. A greater share of the production of methane gas will be for chemification, covering the difference for the energy consumers with associated gases following their deethanization and topping. In accordance with the program for development of gas production, several new structures in the Transylvania basin and zone outside the Carpathians will be put into operation.

Together with the increase in gas extraction, new compression capacities will be installed and the collection and transport system will be amplified. In order to insure the peaks of consumption during the winter, the storage capacity for the gases will be increased. Starting now greater attention is being given to superior utilization of gases, with the program providing for speeding up the projects to extend the topping installations in Calacea (Timis County), Abramut (Bihor), Dofteana (Bacau) and building new topping installations in Ghelinta (Covasna) as well as the second deethanization installation in Moldavia and Romania's western zone.

[Question] Implementation of these programs for supplementary increase in crude oil and gas production in this five-year plan, of course, also requires a supplementary effort from the units which provide for the supply with materials, machinery and equipment for the oil industry. Toward this end, exactly which supplies will be enjoyed by the units in the oil branch?

[Answer] I should mention that the two programs establish in detail the duties of the suppliers in the machine construction, metallurgy and chemistry industries

which mainly insure our technical-material supply. In accordance with the provisions of the programs adopted, we shall benefit from supplementary quantities of tubular material, drilling installations, drilling rods, rotary bits, blow-out preventers, pumping units, motors, chemicals and others. Also with regard to supply I mention the drilling and extraction platforms which will be located in the zones of the Black Sea which have proven to be productive.

Also I want to emphasize in closing that exemplary fulfillment of the goals of the programs for supplementary increase in crude oil and gas production in the current five-year plan also depends both on the powerful mobilization and full work of responsibility of the oil workers as well as on having the machine construction, metallurgy and chemistry units provide the machinery, equipment and materials on schedule and these units have particularly important tasks in this regard.

8071

CSO: 2700/338

CROATIAN FARM COOPERATIVE OFFICIAL SCORES CRITICS OF 'AGROBUSINESS'

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 26 Jul 82 p 6

[Excerpt] At the invitation of DANAS, [Zagreb] weekly, to explain in more detail some of his views expressed at the 12th LCY Congress regarding the private sector in the present stage of economic-social development, Cedo Grbic [president of the Cooperative League of Croatia] turned also to the current discussion about "agrobusiness":

...[Considering] The present campaign revolving around 'agrobusiness,' for instance--this an independent growth and ideological [witch] hunt at a time when there is a shortage of food, when we have 100,000 hectares of uncultivated land, and the severe demands of the stabilization [program] to produce food. I can say this: I understood the attack on those managers and specialists who have used, in an inadmissible way, social property and funds for private business. But now this has extended to the entire agrarian policy. It is being systematically written about in publications. In the No 20 issue of DANAS one finds that the following social rules have been established in connection with this: social land can be cultivated only by socialized farms, private land can be cultivated only by the owners of this land. Also, the long-term leasing of social land to cooperative farmers [private farmers cooperating with cooperatives] is severely criticized, unless the land in question is poor or fragmented [in disconnected plots]. Also, cooperation with workers who are not farmers is severely criticized.

Workers, namely those in the "Belje" [agricultural-industrial combine] who work in the vineyards there have been reproached for cultivating a private vineyard and linking it with that in "Belje." There are doubts about joint vineyards.

Yet here the first cooperators [private workers cooperating with the socialized sector] have pooled the land, set up a modern vineyard, and pooled their labor and resources. And the grapes go to a socialized wine cellar for processing. This method is several times cheaper than building completely socialized vineyards. Doubt is especially cast on leasing of land, especially by those with the maximum land holdings.

I think that this campaign is leading to a senseless situation which could be summarized as follows: better to leave the land uncultivated than to ruin

some (according to certain opinions) socialist principle. But I think that the worst violation of socialist principle is in this situation to leave land unused."

[Editorial Report] The above view was rebutted in a 2-page article by Mirko Sajler in the 20 August 1982 issue of KOMUNIST (Belgrade, pp 8-9), discussing both the above case and other examples in the Slavonija-Baranja area of Croatia where, it was said, the amount of land usurped for private use approximates that of the large "Belje" agricultural-industrial combine. It said that party action against such abuses was resisted by "agrobusinessmen and careerists in the opstina structures and in the management of combines," who argue in administrative organs and in basic LC and trade union organizations that such action is "an attack against the interests of the workers and an attack on agriculture....In fact, [their goal] is greater development of private agrobusiness at the expense of socialized agricultural development. Judgments can be heard from the operating structure within combines that agriculture must be developed more rapidly only by expanding the private sector, through not only increasing that sector's share in production, but through increasing its share in the ownership of land and equipment."

A related article by Predragovic (on page 9) says "private agrobusiness--on private and social land--is the product of numerous contradictions in our total socioeconomic development....This problem cannot be solved only by exacting penalties and by cadre changes. It is essential that the socialized sector understand its social obligation to cultivate every foot of arable land and thus open up the process of pooling labor and funds within the framework of the unified Yugoslav market. Without self-management association not only will there be resistance to the process of associating...but new problems will arise which will steadily reduce socialized productivity and yields. Combines must overcome their own group-ownership ossification...and again join the battle for progress."

PARTY WEEKLY CRITICIZES PRIVATE TAKEOVER OF PUBLIC LAND

Belgrade KOMUNIST in Serbo-Croatian 13 Aug 82 p 20

[Excerpt] The question of usurping land in Kolasin Opstina [Montenegro] should have been put on the LC opstina conference agenda earlier so as to nip in the bud the numerous cases of usurpation, by showing the negative consequences of this and summoning those in authority to responsibility for delaying action against people who are turning social land into private property.

There were not many concrete facts [given at the meeting] except for the declaration that this practice is very widespread, but even those few facts which were brought out showed that land has been usurped in every village, on every hill, in places where wide village roads used to run, where there were pastures and common land. It was said that this problem has existed since 1947 and that since then usurpation has become more and more pronounced and no measures have been taken against it. In the last 5 years only two cases have been brought to court against persons usurping social land. The most frequent cases occur in regard to land bordering public roads, former village greens and pastures. The former mountain pastures have disappeared, changed into private meadows. In many places family buildings have been built. In most cases people have succeeded in registering the land as theirs. Social organs, including the LC and other local organizations, have known about it but have not acted, not wanting to be criticized. When photographs were recently taken in certain regions for purposes of land survey and it was necessary to mark off one's personal property, many managed to put markers far outside their own borders on social land. It is said that there are also individuals who have even sold such land as their own.

In Pljevlje in the last 10 years 319 criminal cases against usurping social land were brought to court, involving a total of 912,659 square meters of land, but many cases of usurpation are not reported.

A special problem is also illegal construction on social land.

CSO: 2800/446

REGULATION ON PATENT APPLICATION PROCEDURE

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 35, 25 Jun 82 pp 980-984

[Regulation No 18421, issued in Belgrade, 10 June 1982, by Dr Dragutin Boskovic, engineer, director of the Federal Bureau of Patents: "Regulation on the Manner of Drafting and Submittal of Patent Applications and Their Appendices"]

[Text] On the basis of Article 99 of the Law on Protection of Inventions, Technical Improvements and Distinguishing Marks (SLUZBENI LIST SFRJ, No 34, 1981), after having obtained the opinion of the Council of the Federal Bureau of Patents, the director of the Federal Bureau of Patents hereby issues the following

REGULATION

On the Manner of Drafting and Submittal of Patent Applications and Their Appendices

Article 1

This regulation prescribes the content, form and manner of drafting and submittal of patent applications and their appendices.

Article 2

The patent application shall be submitted in four copies on Form P-3--Patent Application, which shall be furnished gratis to the patent applicant by the Federal Bureau of Patents. Patent applications shall be printed along with this regulation and shall constitute an integral part of it.

Article 3

On the form referred to in Article 2 of this regulation the following information shall be entered:

- 1) last name and first name or corporate name and designation of the patent applicant;
- 2) occupation or line of business of the patent applicant;

- 3) complete address or domicile of the patent applicant;
- 4) information on the authorized representative if the application is being filed through an authorized representative;
- 5) the abbreviated and actual name of the invention;
- 6) the name of the inventor if the application is not being filed by the inventor or the applicant's statement to the effect that the inventor does not wish to be referred to in the application;
- 7) the number and date of the first or principal application or principal patent in case of separate or supplemental application;
- 8) number of the application, date of submittal of the application and name of the member country of the International Union for Protection of Industrial Property in which the first application was filed if right of priority was sought in the context of Article 75 of the Law on Protection of Patents, Technical Improvements and Distinguishing Marks (hereafter the "Law");
- 9) a list of all the appendices submitted along with the application;
- 10) the applicant's signature.

Article 4

The following appendices shall be submitted along with the properly filled out form referred to in Article 3 of this regulation:

- 1) a description of the invention;
- 2) a statement of the applicant as to the best method known to him for economic use of the invention covered by the application;
- 3) a sketch of the invention if necessary;
- 4) proper authorization if the application is being filed through an authorized representative;
- 5) statement containing information on the joint representative or joint authorized representative if the application is being filed together by more than one person;
- 6) certified copy of the first application if the right of priority has been sought on the basis of a foreign application under Article 75 of the Law, with a translation into one of the languages of the nationalities of Yugoslavia certified by an authorized court interpreter;
- 7) affidavit concerning an officially recognized exhibition (fair) of an international nature if right of priority is being sought from the date of the invention's display--along with indication of data as referred to in Article 74, Paragraph 2, of the Law;

8) the patent application fee paid in the full or reduced amount. When the fee is paid in the reduced amount, it shall be accompanied by the relevant certificate.

Proof of the fee paid on a petition for complete examination of conditions for recognition of the patent envisaged by the Law on the Schedule of Federal Administrative Fees shall be appended if such a petition has been filed.

The appendices referred to in Paragraph 1, Subparagraphs 1 through 3, of this article and all subsequent amendments and supplements shall be submitted in three identical copies.

The patent application and its textual appendices shall be submitted on paper in Format A-4 (210 x 297 mm) without erasures, alterations or additions. Appendices accompanying a patent application may not have text written on the back of the sheet.

Article 5

A patent application is required to inform the Federal Bureau of Patents of a change of its address as given in the application, referring to the P-number.

All submittals which the patent applicant submits to the Federal Bureau of Patents in connection with a patent application must display the P-number.

Article 6

The description of the invention referred to in Article 4, Paragraph 1, Subparagraph 1, of this regulation shall contain the following parts:

- 1) name of the invention;
- 2) description of the subject matter of the invention;
- 3) patent claim;
- 4) brief content of the essence of the invention (presentation or abstract);
- 5) applicant's statement as to the method best known to him for economic use of the invention covered by the application;
- 6) drawing of the invention if necessary.

Article 7

The name of the invention (Article 6, Subparagraph 1, of this regulation) must be the same as in the patent application, must clearly state the essence of the invention and may not contain invented names, commercial names, a stamp, names, code numbers, or abbreviations customary for particular products, and so on.

In case of a supplemental patent application, after the name of the invention information shall be entered on the basic application (P-number) or on the patent (patent number).

Article 8

The description of the subject matter of the invention (Article 6, Subparagraph 2, of this regulation) shall be set forth according to the following subheadings and in the following order:

- 1) the field of technology in which the invention falls;
- 2) the technical problem;
- 3) state of the art of engineering;
- 4) description of solution of the technical problem, along with practical examples and with a list and brief description of the figures contained in the drawing if a drawing exists.

Article 9

The claim is required to begin with an indication of the field of technology to which the invention belongs, including the identifying number under the International Patent Classification if known to the applicant.

Article 10

The technical problem solved by the patent must be stated precisely. By the technical problem is meant any problem whose solution has been made possible by an industrial and technically reproducible solution.

Article 11

Under the state of the art of engineering a survey should be given of the well-known solutions whereby the technical problem has been solved theretofore, and which are known to the applicant, and a criticism of those solutions through an analysis of the shortcomings identified.

The survey of the state of the art of engineering should as a rule be based on a report on the state of the art.

Article 12

The description of the solution of the technical problem along with practical examples and list and brief description of the figures of the drawing, if there is a drawing, as referred to in Article 8 of this regulation, shall begin by setting forth the essence of the invention whereby the technical problem is solved, emphasizing the essence of the solution and what makes it new as compared to the solutions contained in the state of the art.

Thereafter the description of the solution of the technical problem shall go on to set forth the details of the solution, covering all the data necessary for industrial and technical practicability of the solution. To that end the invention must be presented fully, clearly and precisely so that an average specialist would be able to use it in production without additional research, solely on the basis of the description and drawings if necessary.

The solution of the technical problem must be completely defined. All the characteristics of the invention must be so stated as to preclude arbitrariness and conjecture.

If the invention is a process, all its characteristics must be given so that its practicability as demonstrated by the practical examples is entirely covered.

If the invention is a construction, and it is presented in a drawing, the description of the solution shall first set forth the list and brief description of the figures of the drawing, referring to the number and legends in the figures of the drawing, and as evidence of practicability the manner of operation shall also be described, in which the manner in which the particular elements and the construction as a whole function shall be set forth in detail.

If there is more than one way of reducing to practice the same solution of the technical problem (variants of the solution), they shall be described.

Article 13

The patent claim referred to in Article 6, Subparagraph 3, of this regulation shall be entered as a heading on a separate sheet at the end of the specification, and in one or more claims those characteristics of the invention shall be stated for which protection is sought, which make the invention new and which follow from the specification of the invention.

The applicant's signature shall be placed at the end of the patent claim.

Article 14

Every claim within the patent claims referred to in Article 13 of this regulation must be written in just one sentence, which shall first state the name of the invention, which must be the same as in the patent application and specification, and the known elements or solutions, if they are necessary to a detailed explanation of the invention, and then, set off by commas, the expression "manifested in" shall be used and followed by a statement of all the characteristics of the invention for which protection by patent is being petitioned for.

The claim may not be written in paragraphs, but must constitute a single body of text.

If the invention is complicated, if it has several parts or if there are various possibilities for reducing to practice the same technical solution,

previously referred to in the specification, the patent claim may contain a sizable number of claims. The first claim must be composed in conformity with Paragraph 1 of this article, and each succeeding claim shall be given after the name of the invention, which may be shortened, but ahead of the expression "manifested in" there shall be a reference to the relevant previous claim or claims.

The content of one claim may not be repeated.

Article 15

If an invention is a construction consisting of two or more elements, the patent claim must show the mutual mechanical connection of the elements or parts of the device in a static state which as a whole constitutes an innovation, referring to the notation of the elements given in the drawing.

An electrical circuit shall also be regarded as a construction referred to in Paragraph 1 of this article.

Article 16

If an invention is a process, the patent claim must state its essential characteristics so that the novelty of the invention can be examined as a whole, and that within the scope of the solutions referred to in the practical examples.

Article 17

The patent claim may not include vague expressions and expressions which do not clearly and altogether definitely denote the essential characteristics of the invention, and after the expression "manifested in" mathematical formulas may not be entered as a subject of protection.

The description of a device's functioning may not be entered in the patent claim.

Article 18

If protection of an invention has been applied for in a supplemental patent application, the patent claim should state the number of the principal application or patent.

Should there be several versions of solutions, the relevant patent claim which follows after the claim to protect the basic solution shall contain at the beginning these words:

"Device for _____ according to Version I, manifested in _____, device for _____ according to Version II, manifested in _____."

The claims for processes shall be analogously written by variants of the solution.

Article 19

The brief content of the essence of the invention (survey or abstract) referred to in Article 6, Subparagraph 4, of this regulation should be on a separate sheet and may not contain more than 150 words. The survey must concisely set forth the invention so as to make it possible to examine the essence of the solution of the technical problem.

Article 20

The statement of the applicant concerning the manner best known to him for economic use of the invention covered by the application, as referred to in Article 6, Subparagraph 5, of this regulation should contain information or relevant technical knowledge, know-how and instructions which can be used in applying the invention covered by the application in production, which the application asserts represents at the moment when the application is submitted the best mode of economic use of the invention covered by the application which is known to him.

The statement referred to in Paragraph 1 of this article must be given on a separate sheet and must be signed by the applicant.

Article 21

The drawing of the invention referred to in Article 6, Subparagraph 6, of this regulation is a mandatory part of the specification if the invention described is not complete without that appendix.

The drawing of the invention must be clear, altogether legible and understandable.

The drawing of the invention must be done on hard, nonglossy paper or on transparent paper, Format A-4 (297 x 210 mm), which must be flexible, strong and smooth.

Article 22

The drawing of the invention shall contain margins which do not have a border and on which are entered the following:

- 1) in the upper left margin--last name and first name or corporate name and title of the applicant;
- 2) in the upper right margin--number of the sheet if there is more than one sheet;
- 3) in the middle of the upper margin--name of the invention;
- 4) in the lower right margin--signature of the applicant.

The smallest size of the margins shall be: 2.3 cm from the upper edge, 2.5 cm from the edge on the left side, 1.5 cm from the edge on the right side, and 1 cm from the bottom edge.

Article 23

The drawing of the invention must be suitable for direct reproduction by photography, electrostatic processes, offset and microfilming.

The scale of the drawing of the invention must be such that all details can be clearly seen in a graphic reproduction with linear reduction to one-third.

As a rule the drawing shall be done in an orthogonal projection with the necessary number of cross sections, but in exceptional cases, if necessary--in axonometry, isometry, etc. The drawing may also be done in the form of a diagram using standard symbols for the relevant field of engineering.

Article 24

Only those technical expressions, notation and symbols accepted in the relevant field of engineering may be used in the draft of the invention.

The legend designations may be letters, numbers and standard symbols accepted in the relevant field of engineering.

The same elements of the drawing of the invention shall be denoted by the same symbols in all the figures.

The drawing of the invention may not incorporate chemical and mathematical formulas, tables and written text except for individual words when necessary.

Article 25

At the inventor's request the Federal Bureau of Patents shall furnish him specialized aid in consultations.

The Federal Bureau of Patents shall at the inventor's request present him a report on the state of the art of engineering, upon payment of the relevant costs or fees.

Article 26

This regulation shall take effect on the eighth day after publication in SLUZ-BENI LIST SFRJ.

FEDERAL BUREAU OF PATENTS

Patent Application

I Uzun Mirkova
Belgrade 11000

In this application the undersigned submits petition that he be granted a patent on the invention described and presented in the appendices, and to that end he furnishes the following information:

Recognition of a supplemental patent is sought along with the principal patent (application) number:	(61)	Separation is being sought from the first application number:	(62)
--	------	---	------

Applicant	(71)
Last name and first name, occupation (for a physical person)	
Complete name, line of activity (for a legal person)	

Applicant's address
Street and number, zip code, city, republic (province), country

Authorized representative	(74)
Last name and first name, complete address	

Name of the invention	(54)
In one of the languages of the nationalities and ethnic minorities	

Name of the invention
In one of the foreign languages from the first application on the basis of which right of priority is being sought

Inventor	(72)
Last name and first name or declaration that the inventor does not wish to be referred to in the application	

Inventor's address
Street and number, zip code, city, republic (province), country

Right of priority	(30)
Number, date, country	

To Be Filled Out by the Applicant
(see instructions on the back)

Appendices

Specification (in 3 copies)
Drawing (in 3 copies)
Power of attorney
Statement as to employment
Certified copy of the first application
Certified translation of the first
application
(confirmation of priority)

___ sheets of the drawing

___ in ___ date ___

Fee, in dinars _____

(Signature and stamp of
the applicant)

To Be Filled Out
by the Bureau

FEDERAL BUREAU OF PATENTS

(21)

Petition registration number and date

Fee, in dinars _____

OJ _____
(OJ = organizational unit)

Appendix _____

Examiner _____

Note: If the space left for entering the information sought is insufficient, the information under any of the headings should be entered on the back of the application where the prescribed tax stamp or evidence of payment of the fee is affixed.

INSTRUCTIONS

for filling out the form of the patent application

- 1) The patent application shall be filled out in four copies on a typewriter.
- 2) The applicant, in the case of a physical person, shall enter his last name and then first name; in the case of a juridical person, the complete title shall be entered (an organization shall enter the name under which it is registered in the district court).
- 3) A physical person shall enter his occupation, and a juridical person shall enter the line of activity in short form (for example, chemical industry, motor factory, designing office, domestic commerce, private shop, etc.).
- 4) The zip code shall be entered along with the address, in front of the name of the town.
- 5) Information on the authorized representative shall be entered only if the application is being filed through an authorized representative.
- 6) Only the real name of the invention shall be entered under the name of the invention. When the name of the invention is given in one of the foreign languages, the English, French, Russian and German languages may be used.

7) If petition is being made for recognition of the right of priority, the number, date and country of the application on which the right of priority is based shall be entered.

8) If the application is not being filed by the inventor, his last and first name shall be entered, and if possible his complete address or statement by the applicant that the inventor does not wish to be referred to.

9) If it is a question of a domestic juridical person, the stamp shall be affixed in addition to the signature.

10) A fee shall be paid on a patent application under the provisions of the law in effect on the schedule of federal administrative fees, with the provision that an amount greater than 200 dinars shall be paid in through the giro account.

To Be Filled Out by the Bureau

1.

2.

3.

7045

CSO: 2800/445

REGULATION ON RECOGNIZING PATENT RIGHTS

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 35, 25 Jun 82 pp 984-990

[Regulation No 18422, issued in Belgrade, 10 June 1982, by Dr Dragutin Boskovic, engineer, director of the Federal Bureau of Patents: "Regulation on Detailed Regulation of Matters Related to Procedure for Recognition of Rights Whereby Inventions and Distinguishing Marks Are Protected"]

[Text] On the basis of Article 99 of the Law on Protection of Inventions, Technical Improvements and Distinguishing Marks (SLUZBENI LIST SFRJ, No 34, 1981), after having obtained the opinion of the Council of the Federal Bureau of Patents, the director of the Federal Bureau of Patents hereby issues the following

REGULATION

On Detailed Regulation of Matters Related to Procedure for Recognition of Rights Whereby Inventions and Distinguishing Marks Are Protected

I. General Provisions

Article 1

This regulation shall regulate in detail matters related to procedure for recognition of a patent, design or patent and trademark, for establishment of a product mark of origin and for registration of the authorized users of such a designation in a register kept by the Federal Bureau of Patents (hereafter the "Bureau") and matters related to the information to be entered in the register, information to be contained in the document recognizing a right and the information to be published in the official gazette of the Bureau (hereafter the PATENT HERALD).

Article 2

The person submitting an application which is accompanied by a petition for recognition of right of priority in the context of Article 75, Paragraph 1, of the Law on Protection of Inventions, Technical Improvements and Distinguishing Marks (hereafter the "Law") shall cite the following information in the first application being referred to and serving as the basis for recognition of the right of priority:

- 1) the name of the member country of the International Union for Protection of Industrial Property in which the first application was filed;
- 2) the date when the application was filed;
- 3) the number of the application.

Article 3

The person filing an application accompanied by a petition for recognition of the right of priority in the context of Article 75, Paragraph 2, of the Law, in addition to a certified copy of the first application, shall also submit a certified translation of that application.

The translation of the first application referred to Paragraph 1 of this article must be in one of the languages of the nationalities of Yugoslavia.

Article 4

Information on applications for recognition of rights and on rights recognized as referred to in Articles 18, 19, 20, 24, 33, 40, 43 and 44 of this regulation and also information on patents whose validity has expired shall be published in the PATENT HERALD.

II. Provisions Regulating in Detail Matters Related to Procedure for Recognition of a Patent

Article 5

The Bureau shall keep a separate register of patent applications.

The following shall be entered in the register referred to in Paragraph 1 of this article:

- 1) petition registration number and serial number under which the application was entered in the register of patent applications (hereafter the "P-number");
- 2) filing date of the patent application and date of the right of priority petitioned for;
- 3) last name and first name or corporate name or title of the applicant and address or domicile;
- 4) name of the inventor or statement of the applicant that the inventor does not wish to be referred to in the application;
- 5) last and first name or corporate name or title of the authorized representative of the applicant and his address or domicile;
- 6) name of the invention;

- 7) designation in conformity with the International Patent Classification established by the Strasbourg Arrangement (hereafter the "IPC");
- 8) the date as of which, in the context of Article 93, Paragraph 3, of the Law, every person has the right to examine the patent application;
- 9) the date when the patent application was published;
- 10) information contained in the claim concerning complete examination of the patent application;
- 11) information on the manner in which administrative proceedings were terminated and the registration number of the patent granted;
- 12) date of expiration of the patent's validity;
- 13) information on changes.

Article 6

A submittal with a claim for recognition of a patent which does not contain the following shall not be entered in the register of patent applications referred to in Article 5 of this regulation:

- 1) the last and first name or corporate name or title of the applicant;
- 2) information on the basis of which it can be unambiguously established that a patent application is involved;
- 3) the name of the invention, or if the name is not contained in the specification so that it can be unambiguously established;
- 4) the specification including a drawing of the invention if that is necessary from which it unambiguously follows that this is a technical solution which may be an invention;
- 5) the signature of the applicant.

Article 7

The information and appendices in an application for recognition of a patent shall be regarded as clear and complete if they are composed in conformity with the Regulation on the Manner of Drafting and Submittal of Patent Applications and their Appendices.

Article 8

During administrative proceedings for recognition of a patent the Bureau may amend the brief content of the essence of the invention (survey or abstract) and the name of the invention if this does not affect the scope of the protection petitioned for.

Article 9

It shall be regarded that a patent application published in conformity with Article 93, Paragraph 1, of the Law contains a clear and complete description of the invention if it is possible from that description to grasp the essence of the invention or if on the basis of it it is possible to judge that the patent application obviously does not contradict Articles 20 and 23 of the Law.

Article 10

A patent application may be published even if the description of the invention has not included the best method known to the applicant of economic use of the invention or if the following information has not been furnished in the application:

- 1) on the occupation or line of business of the applicant;
- 2) on the joint representative or joint authorized representative if the application is being filed by more than one person.

Article 11

If it is ascertained in the proceedings of complete examination of a patent application that the specification does not afford the possibility of complete examination the Bureau shall call upon the applicant to amend or supplement the application in the sense of Article 7 of this regulation.

In the procedure referred to in Paragraph 1 of this article the Bureau shall call upon the applicant to amend or supplement the application so that the scope of protection of the invention altogether follows from the description of the invention.

Article 12

The Bureau shall not publish a patent application on which proceedings have been suspended before expiration of the period of 18 months from the date when the application was filed or from the date when the right of priority was petitioned for.

The application referred to in Paragraph 1 of this article may not be examined in the context of Article 93, Paragraph 3, of the Law.

Article 13

The right of priority in the context of Article 72, Paragraph 1, of the Law can be substantiated only if the patent application contains the information and appendices referred to in Article 6 of this regulation.

Article 14

The consequences of essential changes of the specification published within the limits of the protection originally petitioned for shall constitute a change of right of priority in the sense of Article 73 of the Law.

Article 15

A patent application shall be examined in the sense of Article 93, Paragraph 3, of the Law on the basis of a submitted written request.

The patent application referred to in Paragraph 1 of this article may be examined only in the room of the Bureau set aside for that purpose and in the presence of an authorized official of the Bureau.

Article 16

All amendments or supplements to a patent application and appendices to such an application may be examined immediately after they have been filed with the Bureau if the period of 18 months has passed from submittal of the patent application or from the date when right of priority was petitioned for.

Article 17

Before expiration of the periods referred to in Article 93, Paragraph 1, of the Law a patent application may be examined only by a person who submits evidence to the Bureau that the patent applicant has warned him in writing that he is committing a violation of his rights arising out of that application.

Article 18

The Bureau shall publish in the PATENT HERALD information on patent applications which may be examined in the sense of Article 93, Paragraph 3, of the Law:

- 1) the P-number;
- 2) the filing date of the application;
- 3) designation in accordance with the IPC;
- 4) the name of the invention;
- 5) last name and first name or corporate name and title of the applicant and his address or domicile.

Article 19

Notification of a patent in the sense of Article 93, Paragraph 1, and Article 94, Paragraph 3, of the Law shall be made by publication in the PATENT HERALD of the following information concerning the patent application:

- 1) the P-number;
- 2) the filing date of the application;
- 3) data on the right of priority petitioned for, as follows:
 - a) date of the right of priority based on exhibition (fair),
 - b) number of the application serving as the basis of the right of priority,
 - c) filing date used as the basis of the right of priority,
 - d) name of the country in which the application was filed which serves as the basis of the right of priority;
- 4) date as of which the application can be examined (Article 93, Paragraph 3, of the Law);
- 5) designation under the IPC;
- 6) name of the invention;
- 7) last name and first name or corporate name and title of the applicant and his address or domicile;
- 8) name of the inventor or statement to the effect that the inventor does not wish to be referred to in the application;
- 9) number of the principal application or principal patent in the case of a supplemental application;
- 10) number of the first application if a separate application is involved;
- 11) survey or abstract.

Article 20

When a petition is filed for complete examination, immediately after that petition is filed, the Bureau shall publish the P-number of the patent application and the designation under the IPC in the next number of the PATENT HERALD.

Article 21

An invention contained in a patent application withdrawn before expiration of the period of 18 months from the date of filing the application or from the date when the right of priority was petitioned for shall be assumed not to be included in the state of the art in the sense of Article 21, Paragraph 2, Subparagraph 1, of the Law provided that invention has not been accessible to the public by publication, display, demonstration or use in a manner making it possible for specialists to use that invention.

Article 22

The Bureau shall enter the following in the register of patents referred to in Article 91 of the Law:

- 1) the patent's registration number;
- 2) information on the patentholder, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,
 - c) occupation or line of business;
- 3) name of the inventor or statement that the inventor does not wish to be referred to in the application;
- 4) application filing date and P-number;
- 5) information on the right of priority acknowledged, as follows:
 - a) date of right of priority based on exhibition (fair),
 - b) number of the application serving as the basis of the right of priority,
 - c) name of the country in which the application was filed which serves as the basis of the right of priority;
- 6) date when the application was published;
- 7) date of registration;
- 8) date as of which the patent is in effect;
- 9) information on extension of a patent's validity;
- 10) designation under the IPC;
- 11) lien or contract license (information on the life of the license, its scope and whether it is exclusive) and mandatory or official license, as well as information on the licensee;
- 12) information on whether the invention is being used by another organization of associated labor in the sense of Article 68 of the Law (corporate name or title of the organization using the invention) and information on commencement and cessation of the use.

Article 23

The patent certificate referred to in Article 92, Paragraph 1, of the Law shall contain the following:

- 1) registration number of the patent and the P-number;
- 2) information on the holder of the patent, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,
 - c) occupation or line of business;
- 3) name of the invention;
- 4) inventor's name;
- 5) date of the right of priority acknowledged;
- 6) date of publication of the patent application;
- 7) date of the patent's entry into the register;
- 8) date until which the patent is in effect;
- 9) information on tax paid for 7-year protection;
- 10) date of issuance of the certificate.

Article 24

The following shall be published in the PATENT HERALD in the sense of Article 92, Paragraph 2, of the Law:

- 1) the number of the patent;
- 2) the P-number;
- 3) the filing date of the application;
- 4) information on the right of priority acknowledged, as follows:
 - a) date of right of priority based on exhibition (fair),
 - b) number of the application used as the basis of the right of priority,
 - c) date of application serving as the basis of the right of priority,

d) name of the country in which the application was filed which is serving as the basis of the right of priority;

5) date as of which the application can be examined (Article 93, Paragraph 3, of the Law);

6) date when the application was published;

7) name of the invention;

8) designation under the IPC;

9) number of the principal application or principal patent if a supplemental application is involved;

10) number of the first application if a separate application is involved;

11) name of the inventor or statement that the inventor does not wish to be referred to in the application;

12) last name and first name or corporate name or title of the patentholder and his address or domicile;

13) patent claim or first claim if the patent claim contains several claims, along with the drawing of the invention if necessary.

Information on cessation of validity and also extension of validity of a patent shall also be published in the PATENT HERALD.

Article 25

The Bureau shall inform the patent applicant or patentholder concerning the following petitions of other persons filed with the Bureau and which pertain to the patent application or registered patent:

1) petition for complete examination of a patent application;

2) petition for issuance of a mandatory license;

3) petition for issuance of a official license;

4) petition for annulment of a patent;

5) proposal to proclaim the nullity of a ruling acknowledging a patent.

Article 26

If the principal patent application has been refused or rejected or if the person submitting the principal patent application has withdrawn it, the person submitting the supplemental application may file a proposal for establishment that the supplemental application become the principal patent

application no later than 3 months from the date of receipt of the ruling rejecting or refusing the principal patent application or no later than 3 months from the date when the request was submitted for withdrawal from the principal patent application.

If the supplemental patent application is bound by a principal patent, and the holder of that patent renounces that right or if the patent is canceled or the decision acknowledging the patent is proclaimed null and void, the applicant may file a proposal to establish that the supplemental patent application has become the principal application no later than 3 months from the date when the principal patent ceased to be valid.

III. Provisions Regulating in Detail Matters Related to Procedure for Recognition of a Pattern or Design

Article 27

The Bureau shall keep a separate register of pattern or design applications.

The following shall be entered in the register referred to in Paragraph 1 of this article:

- 1) the registration number and serial number of the patent or design application (hereafter the "M-number or U-number");
- 2) the filing date of the pattern or design application and the date of right of priority petitioned for;
- 3) last name and first name or corporate name or title of the applicant and his address or domicile;
- 4) last name and first name or corporate name or title of the authorized representative of the applicant and his address or domicile;
- 5) name of the body shape, picture or drawing;
- 6) name of the originator if the originator is referred to;
- 7) information on the manner in which administrative proceedings were terminated and the registration number of the pattern or design granted;
- 8) information on changes.

Article 28

A petition requesting recognition of a pattern or design shall not be entered in the register of applications for patterns or designs referred to in Article 27 of this regulation unless the submittal contains the following:

- 1) last name and first name or corporate name or title of the applicant;

- 2) information on the basis of which it can be unambiguously established that a pattern or design application is involved;
- 3) name of the body shape, picture or drawing;
- 4) specification of the body shape, picture or drawing;
- 5) photograph or drawing of the body shape, picture or drawing unambiguously showing the novelty for which protection is sought;
- 6) applicant's signature.

Article 29

The information and appendices in an application for recognition of a pattern or design shall be regarded as clear and complete if they have been drawn up in conformity with the Regulation on the Manner of Drafting and Submittal of Patent Applications and Their Appendices.

Article 30

The right of priority in the context of Article 72, Paragraph 1, of the Law may be established only if the pattern or design application contains the information and appendices enumerated in Article 28 of this regulation.

Article 31

The Bureau shall enter the following in the register of patterns and designs referred to in Article 91 of the Law:

- 1) the number under which the pattern or design is entered in the register;
- 2) information on the holder of the pattern or design, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,
 - c) occupation or line of business;
- 3) name of the originator if the originator is referred to;
- 4) filing date of the application and M-number or U-number;
- 5) information on right of priority acknowledged, as follows:
 - a) date of right of priority based on exhibition (fair),
 - b) number of the application used as the basis of the right of priority,
 - c) date of the application used as the basis of the right of priority,

- d) name of the country in which the application was filed which is being used as the basis of the right of priority;
- 6) date of registration;
- 7) date as of which the pattern or design takes effect;
- 8) designation in conformity with the Locarno Arrangement on International Classification of Patterns and Designs (hereafter "ICPD");
- 9) lien or contract license (information on the life of the license, its scope and whether it is exclusive) and information on the licensee.

Article 32

The certificate on the pattern or design referred to in Article 92, Paragraph 1, of the Law shall contain the following:

- 1) the M-number or U-number and the number under which the pattern or design, respectively, is entered in the register;
- 2) the real name of the pattern or design;
- 3) information on the holder of the pattern or design, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,
 - c) occupation or line of business;
- 4) last name and first name of the originator and his address if the originator is referred to;
- 5) date of the recognized right of priority;
- 6) date when the pattern or design was entered in the register;
- 7) date the pattern or design expires;
- 8) date of the certificate's issuance.

Article 33

In the context of Article 92, Paragraph 2, of the Law the following shall be entered in the PATENT HERALD:

- 1) the number under which the pattern or design is entered in the register and the M-number or U-number;
- 2) date the application was filed;

3) date of registration;

4) last name and first name or corporate name or title of the holder of the pattern or design and his address;

5) information on the acknowledged right of priority, as follows:

a) date of right of priority based on exhibition (fair),

b) number of the application used as the basis of the right of priority,

c) date of the application used as the basis of the right of priority,

d) name of the country in which the application was filed which is being used as the basis of the right of priority;

6) photograph or drawing of the body shape, picture or drawing;

7) real name of the body shape, picture or drawing;

8) designation under the ICPD;

9) last name and first name of the originator if the originator is referred to.

IV. Provisions Regulating in Detail Matters Related to Procedure for Recognition of a Trademark or Service Mark

Article 34

The Bureau shall keep a separate register of applications for trademarks or service marks.

The following shall be entered in the register referred to in Paragraph 1 of this article:

1) the registration number and serial number of the application for the trademark or service mark (hereafter the "Z-mark");

2) filing date of the application for the mark and the date of the right of priority petitioned for;

3) last name and first name or corporate name or title of the applicant and his address or domicile;

4) last name and first name or corporate name or title of the authorized representative of the applicant and his address or domicile;

5) mark for which protection is being sought and also the colors or combinations of colors if the mark is in color;

6) designation of the class in which the products or services are classified according to the International Classification of Products and Services established by the Nice Arrangement on the International Classification of Products and Services (hereafter "ICPS");

7) information on the manner in which administrative proceedings were terminated and the registration number of the recognized right;

8) information on changes;

9) information as to whether international protection of the mark has been applied for.

Article 35

A petition requesting recognition of a mark shall not be entered in the register of applications for trademarks and service marks referred to in Article 34 of this regulation unless the submittal contains the following:

- 1) last name and first name or corporate name or title of the applicant;
- 2) information from which it can be unambiguously established that an application for a trademark or service mark is involved;
- 3) the mark for which protection is sought;
- 4) a list of the products and services;
- 5) applicant's signature.

Article 36

The information and appendices in an application for recognition of a mark shall be considered clear and complete if they have been drawn up in conformity with the Regulation on the Manner of Drafting and Submittal of Patent Applications and Their Appendices.

Article 37

The Bureau shall enter the following in the register of trademarks and service marks referred to in Article 9. of the Law:

- 1) the number under which the trademark or service mark is entered in the register;
- 2) information on the holder of the mark, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,

- c) occupation or line of business;
- 3) filing date of the application and the Z-number;
- 4) data on recognized right of priority, as follows:
 - a) date of right of priority based on exhibition (fair),
 - b) number of the application used as the basis of the right of priority,
 - c) date of the application which is being used as the basis of the right of priority,
 - d) name of the country in which the application has been filed which is being used as the basis of the right of priority;
- 5) registration date;
- 6) appearance of the mark;
- 7) list of products and services designated and classified under the ICPS;
- 8) date the mark expires;
- 9) information on extension of the mark's validity;
- 10) information on cessation of the mark's validity;
- 11) lien or contract license (information on the life of the license and on whether the license is exclusive) and information on the licensee;
- 12) information on international protection of the mark.

Article 38

The right of priority in the context of Article 72, Paragraph 1, of the Law can be established only if the application for the mark contains the information and appendices enumerated in Article 35 of this regulation.

Article 39

The certificate concerning the mark in the context of Article 92, Paragraph 1, of the Law shall contain the following:

- 1) the number under which the mark is entered in the register and the Z-number;
- 2) appearance of the mark;
- 3) list of products and services;
- 4) information on the holder of the mark, as follows:

- a) corporate name or title or last name and first name,
- b) domicile or address,
- c) line of business;
- 5) date of recognized right of priority;
- 6) date when the mark was entered in the register;
- 7) date to which the fee has been paid;
- 8) date of issuance of the certificate.

Article 40

The following shall be published in the PATENT HERALD in the context of Article 92, Paragraph 2, of the Law:

- 1) the number under which the mark is entered in the register and the Z-number;
- 2) filing date of the application;
- 3) registration date;
- 4) corporate name or title or last name and first name of the holder of the mark and his domicile or address;
- 5) information on recognized right of priority, as follows:
 - a) date of right of priority based on exhibition (fair),
 - b) number of the application used as the basis of the right of priority,
 - c) date of the application being used as the basis of the right of priority,
 - d) name of the country in which the application was filed which is being used as the basis of the right of priority;
- 6) appearance of the mark;
- 7) list of products and services.

V. Provisions Regulating in Detail Matters Related to Procedure for Establishment of a Product Mark of Origin and Registration of Authorized Users of Such Marks

Article 41

The recommendation for establishment of a product mark of origin referred to in Article 41, Paragraph 2, of the Law should contain the following: place

names protected by the product mark of origin; products which may be put on sale with a particular product mark of origin; the place or region which is the origin of the product put on sale with the product mark of origin; the product characteristics which the product must meet to be placed on sale bearing the product mark of origin; the manner in which the product is to be marked and more detailed conditions for recognition of the right to use the particular product marks of origin.

Article 42

The recommendation for entry in the register of holders of protected product marks of origin referred to in Article 42, Paragraph 2, of the Law should contain evidence that the conditions for acquiring the right to use a protected product mark of origin have been met.

Article 43

The Bureau shall enter the following in the register of protected product marks of origin referred to in Article 41 of the Law:

- 1) the registration number of the product mark of origin;
- 2) the date of registration of the product mark of origin;
- 3) the date and number of the decision of the Economic Chamber of Yugoslavia in the sense of Article 40 of the Law;
- 4) the information referred to in Article 41 of this regulation;
- 5) changes pertaining to the product mark of origin.

The Bureau shall enter information on authorized holders of a protected product mark of origin in a separate portion of the register referred to in Paragraph 1 of this article.

Article 44

The Bureau shall enter the following in the register of authorized users of a protected product mark of origin referred to in Article 42, Paragraph 2, of the Law:

- 1) information on the authorized user of the protected product mark of origin, as follows:
 - a) last name and first name or corporate name or title,
 - b) address or domicile,
 - c) occupation or line of business;

- 2) date and number of the document of the competent economic chamber in the republic or autonomous province;
- 3) date of entry in the register of the authorized user of the protected product mark of origin;
- 4) date to which the right to use the product mark of origin is valid;
- 5) information on payment of the fee for extension of the right to use the product mark of origin;
- 6) date when the right to use the product mark of origin expires.

VI. Transitional and Final Provisions

Article 45

The provisions of this regulation shall also apply to applications for recognition of rights protecting inventions and distinguishing marks filed before the date designated for applying the Law on which administrative proceedings have not been completed.

Article 46

Patent applications on which administrative proceedings have not been completed by the date designated for application of the Law shall be published in conformity with Article 93, Paragraph 1, of the Law and Articles 7 and 10 of this regulation even if:

- 1) they do not contain a survey of abstract;
- 2) they do not altogether meet the conditions of regularity with respect to the number of copies of the application and its appendices.

Article 47

Information concerning the P number and designation under the IPC shall be published in the PATENT HERALD for patent applications on which administrative proceedings have not been completed by the date designated for application of the Law, but which may be examined in the context of Article 93, Paragraph 3, of the Law.

Article 48

This regulation shall take effect on the eighth day after publication in SLUZBENI LIST SFRJ.

7045

CSO: 2800/445

END

END OF

FICHE

DATE FILMED

Sept. 20, 1982